

PATENT

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Applicant: James Gerard Merten et al.

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Title: Enabling System for a Pilot Controller

Moline, IL 61265

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Commissioner for Patents

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APPEAL BRIEF

Sir:

This Appeal Brief is filed in connection within four months from the date of filing the Notice of Appeal. The Director is hereby authorized to charge Deposit Account No. 04-0525 for payment of the fee for this Appeal Brief. It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and shortages in other fees be charged, or any overpayment in fees be credited, to Deposit Account No. 04-0525.

REAL PARTY IN INTEREST

The real party in interest is Deere & Company pursuant to an assignment recorded at the United States Patent & Trademark Office on reel 015182 at frame 0068.

## RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

## STATUS OF CLAIMS

Claims 1-39 and 43-45 have been rejected and are being appealed.

## STATUS OF AMENDMENTS

No amendment has been filed subsequent to the final rejection.

## SUMMARY OF CLAIMED SUBJECT MATTER

### Independent Claim 1 Summary

In reference to pages 3-5, paragraphs 10-15, and implement controller enabling system for a work vehicle is provided. The work vehicle (Figures 1 and 2) includes a swivel seat (20) with a first position and a second position and an engine (170). The implement controller enabling system includes an implement controller (160) capable of being enabled and disabled; a first seat switch (110) having a first seat switch first state (Figure 2) and a first seat switch second state (Figure 2), the first seat switch entering the first seat switch first state when the swivel seat (20) is substantially in the first position; a second seat switch (120) having a second seat switch first state and a second seat switch second state, the second seat switch (120) entering the second seat switch first state when the swivel seat (20) is substantially in the second position; and ignition switch (100) having a power-on state (Figure 2) and the power-off state (Figure 2); and an implement controller toggle switch (130) capable of being toggled to an implement controller switch first state (Figure 2) and an implement controller switch second state (Figure 2), the implement controller (160) being enabled when ideal enablement conditions exist, the ideal enablement conditions existing only when the ignition switch (100) is in the power on state, the first seat switch (110) is in the first seat switch first state, the second seat switch (120) is in the second seat switch second state and implement controller toggle switch (130) is toggled to the implement controller switch first state, the implement controller toggle switch (130) being toggled to the implement controller (160) switch first state when the ignition switch (100) is in the power on state in the first seat switch (110) is in the first seat switch first state.

### Independent Claim 11 Summary

In reference to pages 3-5, paragraphs 10-15, and implement controller enabling system for a work vehicle is provided. The work vehicle (Figures 1 and 2) includes a swivel seat (20) with a first position and a second position and an engine (170). The implement controller enabling system includes an implement controller (160) capable of being enabled and disabled; a first seat switch (110) having a first seat switch first state (Figure 2) and a first seat switch second state (Figure 2), the first seat switch entering the first seat switch first state when the swivel seat (20) is substantially in the first position; a second seat switch (120) having a second seat switch first state and a second seat switch second state, the second seat switch (120) entering the second seat switch first state when the swivel seat (20) is substantially in the second position; and ignition switch (100) having a power-on state (Figure 2) and a power-off state (Figure 2); an implement controller toggle switch (130) capable of being toggled to a controller switch first state (Figure 2) and a controller switch second state (Figure 2); and a logic control device (150) for detecting the states of each of the first, second, ignition and implement controller toggle switches (110, 120, 100, 130) and enabling or disabling the implement controller (160) based on the states detected, the logic control device (150) enabling the implement controller (160) being enabled an ideal enablement conditions exists, the ideal enablement condition existing only when the logic control device (150) contiguously detects the power on state, first seat switch first state, the second seat switch second state Amber controller switch first act, the implement controller toggle switch (130) being toggled to the controller switch first state wildy ignition switch (100) is in the power on state and the first seat switch (110) is in the first seat switch first state.

#### Independent Claim 21 Summary

In reference to pages 3-5, paragraphs 10-15, and implement controller enabling system for a work vehicle is provided. The work vehicle (Figures 1 and 2) includes a swivel seat (20) with a first position and a second position and an engine (170). The implement controller enabling system includes an implement controller (160) capable of being enabled and disabled;

In reference to pages 3-5, paragraphs 10-15, a work vehicle is provided. The work vehicle (10) ( Figures 1 and 2) includes a swivel seat (20) having a first position and a second position and an implement controller enabling system, implement controller enabling system comprising: and implement controller (160)

capable of being enabled and disabled; a first seat switch (110) having a first seat switch first state and a first seat switch second state, the first seat switch entering the first seat switch first state when the swivel seat (20) is substantially in the first position; a second seat switch (120) having a second seat switch first state and a second seat switch second state, the second seat switch (120) entering the second seat switch first state when the swivel seat (20) is substantially in the second position; and ignition switch (100) having an ignition switch first state and an ignition switch second state; and implement controller toggle switch (130) capable of being toggled to a controller switch first state and a controller switch second state;; and a logic control device (150) for detecting the states of each of the first seat switch, second seat switch, ignition switch and implement controller toggle switch (110, 120, 100, 130) and enabling or disabling the implement controller (160) when ideal enablement conditions exist, the ideal enablement conditions existing only when the logic control device (150) contiguously detects the ignition switch first state, the first seat switch first state, the second seat switch second state and the controller switch first state, the implement controller toggle switch (130) being toggled to the controller switch first state while the ignition switch (100) is in the ignition switch first state, the first seat switch (110) is in the first seat switch first state and the second seat switch (120) is in the second seat switch second state.

#### Independent Claim 34 Summary

In reference to pages 3-5, paragraphs 10-15, and implement controller enabling system for a work vehicle is provided. The work vehicle (Figures 1 and 2) includes a swivel seat (20) with a first position and a second position and an engine (170). The implement controller enabling system includes an implement controller (160) capable of being enabled and disabled; at least one seat switch (110 or 120) having at least one state indicating the swivel seat (20) is in one of the first position, the second position and a third position, the third position being between the first position and the second position; and ignition switch (100) having an ignition switch first state and an ignition switch second state; and an implement controller toggle switch (130) capable of being toggled to a controller switch first state and the controller switch second state, the implement controller (160) being enabled when ideal enablement conditions exist, the ideal enablement conditions existing only when the ignition switch (100) is in the ignition switch first state, be at least one seat switch indicates that the seat is substantially in the first position and not in the

second position or the third position, and the implement controller toggle switch (130) is toggled to the controller switch first state, implement controller toggle switch (130) being toggled to the controller switch for state wildy ignition switch is in the ignition switch first state and the at least one seat switch (110, 120) is indicating that the seat (20) is substantially in the first position and not in the second position or the third position.

### GROUND OF REJECTION TO BE REVIEWED

The specific ground of rejection presented for review is the rejection of claims 1-39 and 43-45 under 35 USC 102(e) based on US Patent 6,643,577 to Padgett et al. (hereinafter "Padgett").

### ARGUMENT

#### I. Legal Principal of Anticipation

The claims have been rejected under 35 USC 102(e) for alleged anticipation based on Padgett. In order to establish anticipation of a claim each and every element of that claim must be disclosed in a reference; in this case the reference would be Padgett.

#### II. Ground of Rejection Addressed

A. Padgett discloses a backhoe loader 10 with joysticks 25, 26 an operator station 22 and a control module 24 which can place the backhoe loader 10 into three operating modes. Padgett's operator station 22 also includes several switches (e.g., override enabler 29, override trigger 30, implement disabling switch 32, etc.) and displays in the armrests on the first side 43 and the second side 44, respectively. However, Padgett does not disclose "...a first seat switch having a first seat switch first state and a first seat switch second state, the first switch entering the first seat switch first state when the swivel seat is substantially in the first position; a second seat switch having a second seat switch first state and a second seat switch second state, the second seat switch entering the second seat switch first state when the swivel seat is substantially in the second position" as recited in claims 1, 11 and 21. Further, Padgett does not disclose "...ideal enablement conditions existing only when the ignition switch is in the power-on state, the first seat switch is in the first seat switch first state, the second seat switch is in the

second seat switch second state and the implement controller toggle switch is toggled to the implement controller switch first state, the implement controller toggle switch being toggled to the implement controller switch first state when the ignition switch is in the power-on\_state and the first seat switch is in the first seat switch first state” as recited in claims 1 and 11. Moreover, Padgett does not disclose “...the logic control device enabling the implement controller when ideal enablement conditions exist, the ideal enablement conditions existing only when the logic control device contiguously detects the ignition switch first state, the first seat switch first state, the second seat switch second state and the controller switch first state, the implement controller toggle switch being toggled to the controller switch first state while the ignition switch is in the ignition switch first state, the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch second state” recited in claim 21.

Finally, Padgett does not disclose “...an implement controller toggle switch capable of being toggled to a controller switch first state and a controller switch second state, the implement controller being enabled when ideal enablement conditions exist, the ideal enablement conditions existing only when the ignition switch is in the ignition switch first state, the at least one seat switch indicates that the seat is substantially in the first position and not in the second position or the third position, and the implement controller toggle switch is toggled to the controller switch first state, the implement controller toggle switch being toggled to the controller switch first state while the ignition switch is in the ignition switch first state and the at least one seat switch is indicating that the seat is substantially in the first position and not in the second position or the third position” recited in claim 34.

As is readily apparent from the discussion above, Padgett does not disclose every feature of independent claims 1, 11, 21 and 34 and, thus, cannot disclose every feature of claims 2-10, 11-20, 22-39 and 43-45 as these claims depend from independent claims 1, 11, 21 and 34 and recite additional features.

#### B. Claims 1-39 and 43-45

Claims 1-39 and 43-45 are rejected under 35 USC 102(e) based on Padgett. For at least the reasons discussed above in section II.A., Padgett does not disclose every feature of Independent claims 1, 11, 21 and 34 and, thus, cannot disclose every feature of claims 2-10, 11-20, 22-39 and 43-45 as these claims depend from

independent claims 1, 11, 21 and 34 and recite additional features. The Board is urged to reverse the rejection of claims 1-39 and 43-45.

## CLAIMS APPENDIX

1. An implement controller enabling system for a work vehicle, the work vehicle including a swivel seat having a first position and a second position, and an engine, the implement controller enabling system comprising:

an implement controller capable of being enabled and disabled;

a first seat switch having a first seat switch first state and a first seat switch second state, the first switch entering the first seat switch first state when the swivel seat is substantially in the first position;

a second seat switch having a second seat switch first state and a second seat switch second state, the second seat switch entering the second seat switch first state when the swivel seat is substantially in the second position;

an ignition switch having a power-on state and a power-off state; and

an implement controller toggle switch capable of being toggled to an implement controller switch first state and a implement controller switch second state, the implement controller being enabled when ideal enablement conditions exist, the ideal enablement conditions existing only when the ignition switch is in the power-on state, the first seat switch is in the first seat switch first state, the second seat switch is in the second seat switch second state and the implement controller toggle switch is toggled to the implement controller switch first state, the implement controller toggle switch being toggled to the implement controller switch first state when the ignition switch is in the power-on state and the first seat switch is in the first seat switch first state.

2. The implement controller enabling system of claim 1, wherein at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is an electrical switch.

3. The implement controller enabling system of claim 1, wherein the implement controller that is enabled becomes disabled when one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch undergoes a change of state.

4. The implement controller enabling system of claim 1, further comprising a system override switch for enabling the implement controller under non-ideal enablement conditions, the system override switch having an override switch first state and an override switch second state, the non-ideal enablement conditions existing when the system override switch is put in the override switch first state while



the ignition switch is in the power-on state and the ideal enablement conditions do not exist, the implement controller being enabled when the override switch is toggled to the override switch first state in an absence of the ideal enablement conditions.

5. The implement controller enabling system of claim 4, further comprising a monitor, the monitor having an audible signal generator, the audible signal generator emitting an audible signal when the implement controller is enabled in the absence of the ideal enablement conditions.

6. The implement controller enabling system of claim 4, further comprising a monitor, the monitor displaying a message indicating that an override condition exists when the implement controller is enabled in the absence of the ideal enablement conditions.

7. The implement controller enabling system of claim 2, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is closed when it is in a controller switch first state and open when it is in a second state.

8. The implement controller enabling system of claim 2, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is open when it is in a first state and closed when it is in a second state.

9. The implement controller enabling system of claim 5, wherein the audible signal generator emits an audible signal when the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

10. The implement controller enabling system of claim 6, wherein the monitor displays a message indicating a non-ideal enablement when the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

11. An implement controller enabling system for a work vehicle, the work vehicle including a swivel seat having a first position and a second position; and an engine, the implement controller enabling system comprising:

an implement controller capable of being enabled and disabled;

a first seat switch having a first seat switch first state and a first seat switch second state, the first seat switch entering the first seat switch first state when the swivel seat is substantially in the first position;

a second seat switch having a second seat switch first state and a second

seat switch second state, the second seat switch entering the second seat switch first state when the swivel seat is substantially in the second position;

an ignition switch having a power-on state and a power-off state;

an implement controller toggle switch capable of being toggled to a controller switch first state and a controller switch second state; and

a logic control device for detecting the states of each of the first, second, ignition and implement controller toggle switches and enabling or disabling the implement controller based on the states detected, the logic control device enabling the implement controller when an ideal enablement condition exists, the ideal enablement condition existing only when the logic control device contiguously detects the power-on state, the first seat switch first state, the second seat switch second state and the controller switch first state, the implement controller toggle switch being toggled to the controller switch first state while the ignition switch is in the power-on state and the first seat switch is in the first seat switch first state.

12. The implement controller enabling system of claim 11, wherein at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is an electrical switch.

13. The implement controller enabling system of claim 11, wherein the logic control device disables an enabled implement controller when one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch undergoes a change of state.

14. The implement controller enabling system of claim 11, further comprising a system override switch for enabling the implement controller under non-ideal enablement conditions, the system override switch having an override switch first state and an override switch second state, the non-ideal enablement conditions existing when the system override switch is put in the override switch first state while the ignition switch is in the power-on state and the ideal enablement conditions do not exist, the logic control device enabling the implement controller under non-ideal enablement conditions.

15. The implement controller enabling system of claim 14, further comprising a monitor having an audible signal generator, the logic control device causing the audible signal generator to emit an audible signal when the implement controller is enabled in an absence of the ideal enablement conditions.

16. The implement controller enabling system of claim 14, further comprising

a monitor, the logic control device causing the monitor to display a message indicating that an override condition exists when the implement controller is enabled in an absence of the ideal enablement conditions.

17. The implement controller enabling system of claim 12, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is closed when it is in a first state and open when it is in a second state.

18. The implement controller enabling system of claim 12, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is open when it is in a first state and closed when it is in a second state.

19. The implement controller enabling system of claim 15, wherein the logic control device causes the audible signal generator to emit an audible signal when the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

20. The implement controller enabling system of claim 16, wherein the logic control device causes the monitor to display a message indicating a system fault when the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

21. A work vehicle comprising:  
a swivel seat having a first position and a second position  
and an implement controller enabling system, the implement controller enabling system comprising:  
an implement controller capable of being enabled and disabled;  
a first seat switch having a first seat switch first state and a first seat switch second state, the first seat switch entering the first seat switch first state when the swivel seat is substantially in the first position;  
a second seat switch having a second seat switch first state and a second seat switch second state, the second seat switch entering the second seat switch first state when the swivel seat is substantially in the second position;  
an ignition switch having an ignition switch first state and an ignition switch second state;  
an implement controller toggle switch capable of being toggled to a controller switch first state and a controller switch second state; and

a logic control device for detecting the states of each of the first seat switch, second seat switch, ignition switch and implement controller toggle switch and enabling or disabling the implement controller based on the states detected, the logic control device enabling the implement controller when ideal enablement conditions exist, the ideal enablement conditions existing only when the logic control device contiguously detects the ignition switch first state, the first seat switch first state, the second seat switch second state and the controller switch first state, the implement controller toggle switch being toggled to the controller switch first state while the ignition switch is in the ignition switch first state, the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch second state.

22. The work vehicle of claim 21, wherein at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is an electrical switch.

23. The work vehicle of claim 21, wherein the logic control device disables an enabled implement controller when one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch undergoes a change of state.

24. The work vehicle of claim 21, further comprising a system override switch for enabling the implement controller under non-ideal enablement conditions, the system override switch having an override switch first state and an override switch second state, the non-ideal enablement conditions existing when the system override switch is put in the override switch first state while the ignition switch is in the ignition switch first state and the ideal enablement conditions do not exist, the logic control device enabling the implement controller under the non-ideal enablement conditions.

25. The work vehicle of claim 24, further comprising an audible signal generator, the logic control device causing the audible signal generator to emit an audible signal when the implement controller is enabled in an absence of the ideal enablement conditions.

26. The work vehicle of claim 24, further comprising a monitor, the logic control device causing the monitor to display a message indicating that an override condition exists when the implement controller is enabled in an absence of the ideal enablement conditions.

27. The work vehicle of claim 22, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is closed when it is in a first state and open when it is in a second state.

28. The work vehicle of claim 22, wherein the at least one of the first seat switch, second seat switch, ignition switch and implement controller toggle switch is open when it is in a first state and closed when it is in a second state.

29. The work vehicle of claim 25, wherein the logic control device causes the audible signal generator to emit an audible signal when the implement controller toggle switch is toggled to the controller switch first state while the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

30. The work vehicle of claim 26, wherein the logic control device causes the monitor to display a message indicating a non-ideal enablement when the implement controller toggle switch is toggled to the controller switch first state while the first seat switch is in the first seat switch first state and the second seat switch is in the second seat switch first state.

31. The implement controller enabling system of claim 1, wherein the implement controller is a joystick.

32. The implement controller enabling system of claim 11, wherein the implement controller is a joystick.

33. The work vehicle of claim 21, wherein the implement controller is a joystick.

34. An implement controller enabling system for a work vehicle, the work vehicle including a swivel seat having a first position and a second position, and an engine, the implement controller enabling system comprising:

- an implement controller capable of being enabled and disabled;

- at least one seat switch having at least one state indicating the swivel seat is in one of the first position, the second position and a third position, the third position being between the first position and the second position;

- an ignition switch having an ignition switch first state and an ignition switch second state; and

- an implement controller toggle switch capable of being toggled to a controller switch first state and a controller switch second state, the implement controller being enabled when ideal enablement conditions exist, the ideal enablement conditions

existing only when the ignition switch is in the ignition switch first state, the at least one seat switch indicates that the seat is substantially in the first position and not in the second position or the third position, and the implement controller toggle switch is toggled to the controller switch first state, the implement controller toggle switch being toggled to the controller switch first state while the ignition switch is in the ignition switch first state and the at least one seat switch is indicating that the seat is substantially in the first position and not in the second position or the third position.

35. The implement controller enabling system of claim 34, wherein the implement controller is enabled when non-ideal enablement conditions exist, the non-ideal enablement conditions existing when the implement controller toggle switch is toggled to the controller switch first state while the ignition switch is in the ignition switch first state and the at least one seat switch indicates the swivel seat is not in the first position.

36. The implement controller enabling system of claim 35, wherein the implement controller is enabled when non-ideal enablement conditions exist, the non-ideal enablement conditions existing when the implement controller toggle switch is toggled to the controller switch first state while the ignition switch is in the ignition switch first state and the indicates the swivel seat is in one of the second position and the third position.

37. The implement controller enabling system of claim 35, wherein the at least one seat switch comprises:

a first seat switch having a first seat switch first state and a first seat switch second state, the first seat switch entering the first seat switch first state when the swivel seat is substantially in the first position; and

a second seat switch having a second seat switch first state and a second seat switch second state, the second seat switch entering the second seat switch second state when the seat switch is substantially in the second position.

38. The implement controller enabling system of claim 37, wherein the swivel seat is substantially in the first position when it is angularly within 15° of the a backhoe operating position.

39. The implement controller enabling system of claim 37, wherein the swivel seat is substantially in the second position when it is angularly within 15° of the a loader operating position.

40. - 42. (Canceled)

43. The implement controller enabling system of claim 4, wherein the override switch comprises the implement controller toggle switch.

44. The implement controller enabling system of claim 14, wherein the override switch comprises the implement controller toggle switch.

45. The implement controller enabling system of claim 24, wherein the override switch comprises the implement controller toggle switch.

## EVIDENCE APPENDIX

No information is included in this appendix.



## RELATED PROCEEDINGS APPENDIX

No information is included in this appendix.

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